What is claimed is:

- An optical disk, used to play in coordination with the downloaded content, comprising a public key which is used to verify whether the downloaded content is authenticated.
- 2. The optical disk according to claim 1, wherein the public key being stored in the BCAs zone of the optical disk.
 - 3. The optical disk according to claim 1, wherein the public key being stored in the media content zone of this laser disk.
 - 4. An optical disk player, comprising:
- a reading-out means for reading-out the content and the public key of the optical disk;
 - a network interface for receiving related downloaded content;
 - a verifying means for verifying whether the related downloaded content is authenticated according to the public key read-out from the optical disk.
- 5. The optical disk player according to claim 4, further comprising:
 - a detecting means for detecting the integrality of the downloaded content, said verification will not be executed if the detected content is not integral.
 - 6. The optical disk player according to claim 4, wherein the downloaded content being an application program.
- 7. The optical disk player according to claim 6, wherein the downloaded application program being the JAVA language application program.
 - 8. A playing method, comprising: reading-out the content and the public key of an optical disk;

downloading the related content;

5

10

15

20

verifying whether the downloaded content is authenticated according to the public key read-out from the laser disk, in order to confirm whether the downloaded content will be operated.

9. The playing method according to claim 8, further comprising:

detecting the integrality of the downloaded content to confirm whether the downloaded content is integral, said verification step will not be executed if the content is not integral; said verification step will be executed if the detected content is integral.

- 10. The playing method according to claim 8 or 9, wherein the downloaded content will be refused to operate if the verified downloaded content is not authenticated.
- 11. The playing method according to claim 10, wherein the downloaded content will be operated if the verified downloaded content is authenticated.
- 12. The playing method according to claim 8, wherein the downloaded content being an application program.
- 13. The playing method according to claim 12, wherein the downloaded application program being the JAVA language application program.
- 14. An optical disk, used to play in coordination with the downloaded content, comprising a part used to verify whether the downloaded content is authenticated.
 - 15. An optical disk, used to realize playing by being connected with the network server, comprising a part used to verify the playing permission of the optical disk in coordination with the network information.

WO 2005/036812 PCT/IB2004/052053

16. The optical disk according to claim 15, wherein the part being the public key stored in the optical disk.